

REMARKS

This Application has been carefully reviewed in light of the Office Action. Claims 1-4, 7-16, and 45-66 are pending in the Application and stand rejected. Reconsideration and favorable action are requested.

Rejections Under 35 U.S.C. § 103

The Office Action rejects Claims 1, 2, 4, and 7-16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,532,215 to Muntz (“*Muntz*”) in view of U.S. Patent No. 6,229,814 to McMillian et al. (“*McMillian*”) and further in view of U.S. Patent Application Pub. No. 2002/0118819 by Li (“*Li*”). The Office Action rejects Claims 45-62 and 64-66 under 35 U.S.C. § 103(a) as being unpatentable over *Muntz* in view of *McMillian*. The Office Action rejects Claim 3 under 35 U.S.C. § 103(a) as being unpatentable over *Muntz* in view of *McMillian*, *Li*, and U.S. Patent No. 6,909,781 to Itri (“*Itri*”). The Office Action rejects Claim 63 under 35 U.S.C. § 103(a) as being unpatentable over *Muntz* in view of *McMillian*, and further in view of *Itri*. Applicants respectfully traverse these rejections.

Independent Claim 45 is allowable at least because the combination of *Muntz* and *McMillian* proposed in the Office Action fails to disclose, expressly or inherently, “determining whether any components in the transmit channel or receive channel are malfunctioning by detecting, by the digital signal processor, any resulting signal in the receive channel.” The Office Action relies on the area between DAC 32 and line driver 46 of *Muntz* as teaching a transmit channel, and the area between ADC 34 and line receiver 48 as teaching a receive channel. *See Office Action*, Page 6. Even if this is correct, which Applicants do not concede, *Muntz* still fails to disclose “determining whether any components in the transmit channel or receive channel are malfunctioning by detecting, by the digital signal processor, any resulting signal in the receive channel.”

For example, *Muntz* discloses merely determining whether there are fault conditions in the *medium 58*. *See Muntz*, Col. 8, Lines 2-6; *see also Muntz*, Col. 9, Lines 42-52. This medium 58 of *Muntz*, however, not only fails to disclose either a transmit channel or a receive channel, but the Office Action already relies on the medium 58 of *Muntz* to disclose a *combined channel*. *See Office Action*, Page 7 (stating “a medium 58 (combined channel)”). Therefore, even if this reliance is correct, which Applicants do not concede, *Muntz* fails to disclose, expressly or inherently, “determining whether any components in the *transmit*

channel or receive channel are malfunctioning by detecting, by the digital signal processor, any resulting signal in the receive channel” of Claim 45 (emphasis added).

Additionally, Applicants respectfully note that a previous Office Action mailed January 10, 2008 (“*Previous Office Action*”) contended:

It is Examiner’s understanding that the transmit channel between DAC 32 and line driver 46 as well as the receive channel between ADC 34 and line receiver 48 coupled via hybrid coupler 50 to medium 58 (combined channel) as shown in Figure 2 together constitute a bidirectional channel between the digital signal processor and a communication network 12. It follows that the determining of fault conditions in the medium 58 by the digital signal processor implies a fault condition in this bidirectional channel between the digital signal processor and the communication network 12.

See Previous Office Action, Pages 18-19. This, however, is incorrect.

First, as discussed above, *Muntz* merely discloses determining fault conditions in the medium 58. *See Muntz*, Col. 8, Lines 2-6. Medium 58, however, is a component of network 12. *See Muntz*, Col. 8, Lines 3-6 (stating “the medium 58 of the network 12”). As a result, at the most, *Muntz* merely discloses determining fault conditions in the *medium 58 of network 12*, not the “bidirectional channel between the digital signal processor and the communication network 12”—as is contended in the *Previous Office Action*.

Second, the areas between DAC 32 and line driver 46 and between ADC 34 and line receiver 48—which the *Office Action* contends¹ disclose the transmit channel and receive channel of Independent Claim 45—are clearly *located within device 14*. *See Muntz*, Figure 2; *see also Muntz*, Col. 4, Line 26 - Col. 5, Line 10. *Muntz*, however, clearly discloses that the “reflections or echoes” (which are used to determine the fault conditions) occur outside of device 14—and thus, outside of the alleged² transmit and receive channels. *See Muntz*, Col. 8, Lines 30-33 (stating that after the signal is reflected, it is “transmitted *back to the device 14*.”); *see also Muntz*, Abstract. As a result, *Muntz* merely discloses determining the fault conditions in medium 58—not in “the transmit channel or receive channel” as is recited in Independent Claim 45.

Consequently, the combination of *Muntz* and *Li* proposed in the Office Action fails to disclose the limitations of Claim 45. For at least this reason, Independent Claim 45 is allowable, as are Claims 46-54 that depend therefrom. For analogous reasons, Independent

¹ Applicants do not concede that this contention is correct.

² Applicants do not concede that this allegation is correct.

Claims 1, 55, 60, 65, and 66 are allowable, as are Claims 2-4, 7-16, 56-59, and 61-64 that depend therefrom. Reconsideration of favorable action are requested.

New Claims 67-72

Applicant's have added new Dependent Claims 67-72. Dependent Claims 67-72 depend, either directly or indirectly, from Independent Claims 1, 17, 45, 55, 60, and 65, respectively. For at least the reasons discussed above regarding Independent Claim 45, Dependent Claim 67-72 are allowable. Favorable action is requested.

CONCLUSION

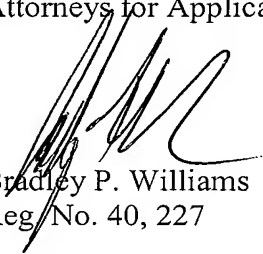
Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicants respectfully request full allowance of all pending Claims.

If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, please feel free to contact the undersigned attorney for Applicants.

Applicants believe no fees are due. Nonetheless, the Commissioner is hereby authorized to charge any other fees and/or credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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